Exhibit C

Protocol for Determining the Effect of Temperature Range on CTE Values

The effect of temperature range on CTE values was studied using a commercial sample of Corning Incorporated Glass Composition No. 1737.

The overall protocol comprised:

    (1)   obtaining expansion versus temperature data,

    (2)   fitting a polynomial to that data, and

    (3)   using the polynomial to obtain CTE values for the temperature ranges: 0-300°C, 25-300°C, 50-300°C, 30-380°C, 50-350°C, and 100-300°C.

To cover the entire temperature range spanned by this set of ranges, i.e., 0°C to 380°C, two dilotrometric measurements of the same glass were used. The first covered the range from –70°C to 100°C, and the second from 25°C to 580°C. The zero point was slightly different for the two measurements and thus the higher temperature data was modified by adding to that data the average offset over the overlapping temperature region, which was 60 ppm.

A polynomial was then fit to the combined data using a conventional least squares technique, which gave:

$$y = -4 \times 10^{-06} \cdot x^3 + 0.0042 \cdot x^2 + 2.936 \cdot x - 1.2495$$

where y is expansion in ppm and x is temperature in °C. The R^2 value for the fit was 0.9999.

CTE values for each of the above ranges was then obtained by evaluating the polynomial for the upper end of the range and then subtracting from that value, the value obtained by evaluating the polynomial for the lower end of the range and dividing the resulting difference by the extent of the range, e.g., for the

0-300°C range, the CTE was calculated as CTE(0-300°C) = [y(x=300) − y(x=0)]/300. See ASTM E228-95 a copy of which is submitted herewith. The results are shown in the following table:

Temperature Range (°C)	CTE (x10⁻⁷/°C) for 1737	Offset (x10⁻⁷/°C)
0-300	38.3	--
25-300	39.1	−0.8
50-300	39.8	−1.5
30-380	40.3	−2.0
50-350	40.5	−2.2
100-300	41.0	−2.7

As can be seen in this table, the CTE for the 0-300°C temperature range is smaller than that for the other temperature ranges. The offsets set forth in the table are the values which transform a CTE for a given range to a CTE for the 0-300°C range. The magnitude of the offset varies with the range being transformed, the minimum offset being −0.8 x 10⁻⁷/°C in the case of a transformation from the 25-300°C range to the 0-300°C range and the maximum offset being −2.7 x 10⁻⁷/°C in the case of a transformation from the 100-300°C range to the 0-300°C range.